

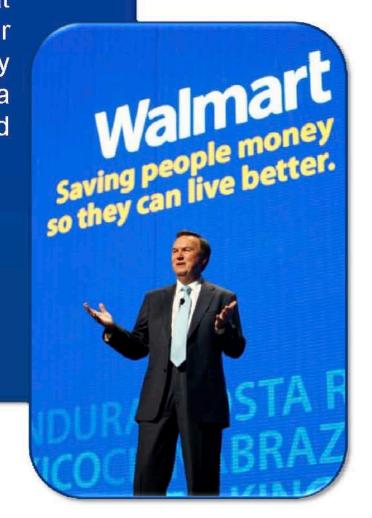
Commitment to Sustainability Walmart Logistics

Elizabeth Fretheim
Director, Sustainability - Logistics
November 18, 2011



"When I became CEO last year, I said that we would "broaden and accelerate" our commitment to sustainability at Walmart. By that, I meant we would make sustainability a priority throughout our entire company and we would act with a sense of urgency."

Mike Duke
President and CEO
Walmart
Walmart Global Sustainability Report, 2010





Walmart's Aspirational Sustainability Goals



To be supplied 100% by renewable energy



To create zero waste



To sell products that sustain people and the environment



Transportation Network Goals

- Achieve a 25 percent increase in fleet efficiency in the U.S. by October 2008
 - Completed and reached 38%
- Double fleet efficiency in the U.S by 2015
 - Measured as cases shipped per gallon burned
- Increase use of alternative fuels
 - Life cycle assessment
 - MPG & maintenance effects
 - Decrease emissions
 - No food sources

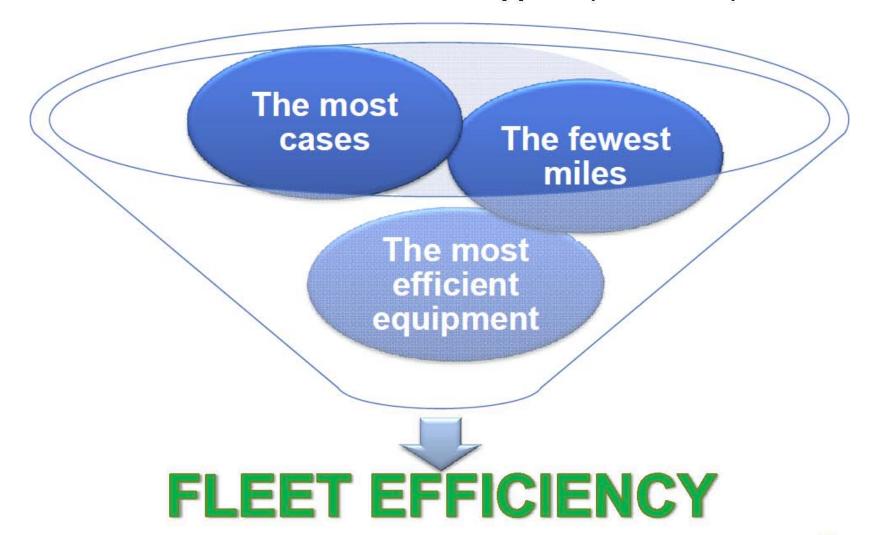






Walmart Fleet Efficiency Defined

Walmart Fleet Efficiency = Cases shipped / Gallon Burned = Cases shipped / (Miles/MPG)





Doing More with Less

Fill the trailer

- Improve Packaging
- More efficient loading
- Delivery Schedules

Improve Routing

- Ensure full trailers
- Drive shorter, safer and smarter routes
- Reduce out of route excess mileage

Reduce Empty Mileage

- Increase vendor backhauls
- Integrate into the grocery business
- Optimize network design

Deploy Innovative Technology

- Enhance dispatching tools
- Gain metrics visibility through dashboards
- Deploy network optimization software

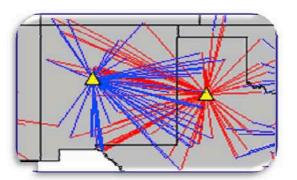
Straight (26 pallets)

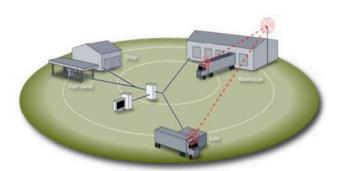
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100% Turned (30 pallets)

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Fuel Economy / MPG

The Basics

- Engine calibration
- Driver training
- Speed governors
- Good maintenance (e.g. tire pressure)

Advanced Technology

- Aerodynamics
- Light weight
- Electrification
- Alternative fuels
- Advanced engine technologies
- Auxiliary Power Units (APUs)
- Fuel efficient tires
- Nitrogen filled tires
- Synthetic oils





Walmart's Advanced Equipment





Advanced Systems



Natural Gas



Biodiesel



ICR350 Engine vs. Alternatives

Superior Economics

- Same or lower price
- 20% more efficient
- 50% size / weight
- Lower maintenance

Best Emissions

- Near zero emissions
- No after-treatment required
- No add-ons



- Multiple markets
- Any fuel
- Dual fuel switching







Challenges

1. Reducing Miles

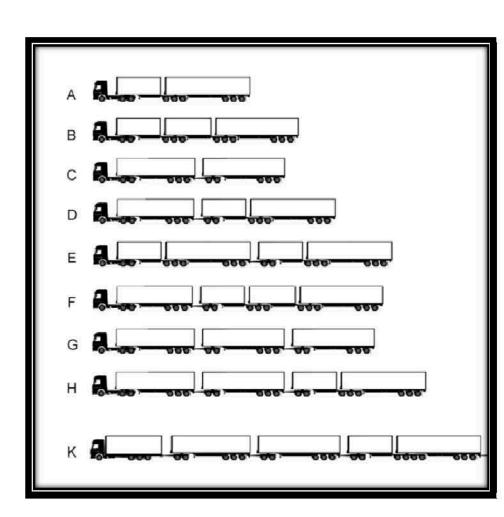
Size and weight restrictions

Increasing Fuel Economy

- Resources
- Congestion
- Inconsistent state regulations
- One-size fits all regulations

3. Alternative Fuels

- No clear leader
- Need for new infrastructure
- Effects on MPG and maintenance





Achievements in 2010

- Increased efficiency from 2005 baseline by 65%
 - ✓ Delivered 57M more cases driving 35M less miles over 2009
 - ✓ At 2009 efficiency 49M miles were avoided
 - ✓ Efficiency saved almost \$81M
 - ✓ Avoided emitting almost 40,000 metric tons of CO₂ (~7700 cars)
- Comparison to 2005
 - ✓ Avoided over 300M miles and 680,000 metric tons CO₂ (~130,000 cars)
 - √ Saved over \$500M





Sharing our Learnings

By sharing our learnings, we can:

- Drive innovation
- Reduce the cost of new technologies
- Increase sustainable practices in all sectors







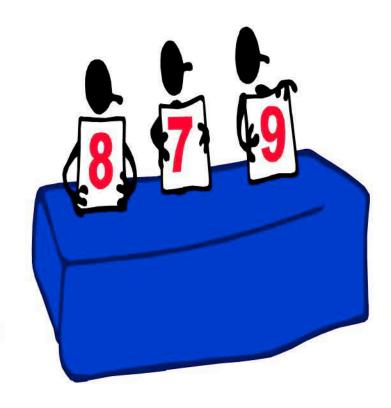


SmartWay Partnership

- Member since 2004
- Excellence Award Winner
- Consistent top score

Benefits:

- Consistent with Walmart direction
- Visibility to the efforts
- Benchmark to assess carrier efforts
- Benchmark to evaluate Walmart progress
- Foundation for technology assessment
- Avenue for industry collaboration





"[Our Next Generation Customers] don't want to have to choose between products they can afford and products that mean a better life, like sustainably grown local fruits and vegetables. They care about sustainability and like that we do too...

They also have higher expectations for the role of business in solving problems. Only those businesses that solve problems will earn trust."

Mike Duke
President and CEO
Walmart
Shareholders Meeting, 2011







